

about 0.1 mm. and at least about a 3 diopter change in the focusing power of said eye is achieved.

3. The intraocular lens assembly of claim 2 wherein said radial increment is at least about 0.2 mm. and said change in focusing power is at least about 8 diopters.

4. The intraocular lens assembly of claim 1 wherein the central lens is inflated by injecting therein a viscous fluid or a fluid composition which is a gel or cures with a gel-like or an elastomeric consistency.

5. The intraocular lens assembly of claim 1 wherein the central lens is molded from an elastomeric material prior to implantation.

6. The intraocular lens assembly of claim 1 wherein the outer ring member is molded from an elastomeric material prior to implantation.

7. The intraocular lens assembly of claim 1 wherein the outer ring member and the web member of said ring structure are formed in a multi-lobe configuration.

8. The intraocular lens assembly of claim 1 wherein said central lens and said ring structure including said outer ring member and said web member are formed from a single elastic material.

9. An intraocular lens assembly for implantation into the posterior chamber of a human eye in operative engagement with a circumferentially extending ciliary muscle of said eye comprising a central lens supported by a ring structure, said ring structure including an outer ring member having a web member extending radially inwardly of said outer ring member, said web member being connected at its distal end to said central lens, said outer ring member transmitting tension to said central lens via said web member to stretch said central lens radially outwardly after implantation, said outer ring being positioned to operatively engage said circumferentially extending muscle after implantation so that said outer ring is compressed by said muscle upon contraction of the muscle whereby said tension transmitted from said outer ring member to said central lens via said web member is relaxed enabling said central lens to essentially uniformly deform about its circumference and alter its curvature, and wherein the outer ring is inflated by injecting therein a viscous fluid or a fluid composition which is a gel or cures with a gel-like or an elastomeric consistency.

10. An accommodating lens assembly comprising an essentially circular central lens adapted for implantation into an eye, said lens being operatively interconnected to means for exerting a radially outwardly extending tension on said lens after implantation so that said lens is stretched radially outwardly into a nonaccommodative shape and for relaxing said tension exerted on said lens to enable said lens to contract its diameter and thereby change curvature in order to increase focusing power and to achieve accommodation, said means for exerting tension on said lens and for relaxing said tension comprising a ring structure, said ring structure including an inflatable outer ring member.

11. An intraocular lens assembly comprising an essentially circular and elastically deformable central lens and a compressively deformable outer ring member circumscribing said lens, said assembly being adapted for implantation into an eye in a manner such that compressive force is applied to said outer ring member when muscles of the eye contract and such compressive force is absent when said muscles are relaxed, said outer ring member being adapted to abuttingly engage said muscles, said lens being operatively interconnected to said outer ring member so that, after implantation, when said compressive force on said outer ring member is absent, said outer ring member exerts a radially outwardly extending force on said lens whereby said lens is

stretched radially outwardly and, when said compressive force is applied to said outer ring member and said outer member is compressively deformed, said force exerted on said lens by said outer member is relaxed to enable said lens to contract its diameter and thereby change curvature in order to increase focusing power and to achieve accommodation.

12. The accommodating lens assembly of claim 11 wherein said ring structure includes an outer ring member molded from an elastomeric material.

13. The accommodating lens assembly of claim 11 wherein said ring structure includes an outer ring member and a web member formed intermediate said central lens and said outer ring.

14. An accommodating lens assembly for implantation into a posterior chamber of an eye in engagement with a circumferentially extending ciliary muscle of said eye comprising a ring structure supporting an inflatable central lens structure, said ring structure including an inflatable outer ring member having web members extending therefrom, said web members being connected to said central lens structure at their distal ends, said lens structure being formed of an elastic material and acting as a deformable focusing portion of said assembly, said outer ring member being adapted to engage with and to be compressed by contractions of said ciliary muscle after said assembly is implanted in said eye whereby tension on said deformable lens structure is relaxed enabling adjustment of the curvature and geometry of said lens to achieve accommodation.

15. The accommodating lens assembly of claim 14 wherein said central lens structure comprises two expansible, congruent circular membranes sealed together along their circumferential edges except for an edge section which is left unsealed to provide a passage for introduction of material into a space between said membranes to inflate said lens structure.

16. The accommodating lens assembly of claim 15 wherein said membranes are formed from an elastic material selected from the group consisting of silicone rubber, polyurethane rubber and mixtures thereof.

17. The accommodating lens assembly of claim 15 wherein said material employed to inflate said lens structure is selected from the group consisting of viscous fluids, fluid compositions which are gels, fluid compositions which cure with a gel consistency and mixtures thereof.

18. The accommodating lens assembly of claim 14 wherein said ring structure is formed from two expansible members shaped in congruent multi-lobe configurations, said two members being sealed together along peripheral edges and along an intermediate boundary line to form a fill chamber between said sealed edges and said boundary line which comprises the inflatable outer ring member of said ring structure.

19. The accommodating lens assembly of claim 18 wherein an opening is formed in a surface of one of the two expansible members, said opening communicating with said fill chamber for introduction of material into said chamber to inflate said outer ring member.

20. The accommodating lens assembly of claim 18 wherein said expansible members are formed from polyimide and polyester polymers.

21. The accommodating lens assembly of claim 18 wherein said material employed to inflate said outer ring member is selected from the group consisting of viscous fluids, fluid compositions which are gels, fluid compositions which cure with a gel consistency and mixtures thereof.

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